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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/057,087	01/26/2002	Andrew Martin Mallinson	ESST-02900	1432
49100	7590	05/26/2005	EXAMINER	
STEVENS LAW GROUP, P.C. P.O. BOX 1667 SAN JOSE, CA 95109			MAI, TAN V	
			ART UNIT	PAPER NUMBER
			2193	

DATE MAILED: 05/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/057,087

Applicant(s)

MALLINSON, ANDREW MARTIN

Examiner

Tan V. Mai

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 November 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 18 and 19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 and 20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 8/26/02.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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1. Applicant's election of Species I, Claims 1-17 and 20, in Paper filed 11-22-04 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 4, 6-7 and 20 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Haque.

As per independent claim 1, Haque teaches, e.g., see Figs. 2 and 5, the claimed combinations. The device includes a parallel array of processing elements, each of said processing elements comprising an analog sampling circuit (Si) and multiplier (Mi); timing circuit (switches 1i); and summing means (7).

As per dependent claim 4, Haque teaches the claimed feature.

Due to the similarity of claims 6-7 and 20 to claims 1 & 4, they are rejected under a similar rationale.

4. Claims 1, 4, 6-7 and 20 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Nelson.

As per independent claim 1, Nelson teaches, e.g., see Figs. 3 and 5, the claimed combinations. The device includes a parallel array of processing elements, each of said

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processing elements comprising an analog sampling circuit (50-53) and multiplier (60-63); timing circuit (switches 40-43); and summing means (90).

As per dependent claim 4, Nelson teaches the claimed feature

Due to the similarity of claims 6-7 and 20 to claims 1 & 4, they are rejected under a similar rationale.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2-3, 5, 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haque.

Haque has been discussed in paragraph #3 above.

As per dependent claim 2, the claim adds the "scaling factors ... correspond to the coefficients in a Fourier series approximation". The feature is old and well known in the art, e.g., see (1) Wardle et al. (col. 21, lines 31-34), (2) Offord et al (col. 3, lines 63-67), Bowser et al. (col. 2, lines 32-40), (4) Felts, III et al (col. 2, lines 45-64), and Applicant's "BACKGROUND OF THE INVENTION". It would have been obvious to a person having ordinary skill in the art at the time the invention was made to design the claimed invention according to Haque's teachings because the "coefficients in a Fourier series approximation" feature is merely design choice for desired application.

As per dependent claim 3, the claim adds the "timing circuit comprises a plurality of delay elements". Haque teaches the equivalent function, see "switches 1i".

As per dependent claim 5, due to the similarity of combined claims 3-4, it is rejected under a similar rationale.

Due to the similarity of claims 8-9 to claims 2-3, they are rejected under a similar rationale.

7. Claims 10-16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haque in view of Applicant's "BACKGROUND OF THE INVENTION".

Haque has been discussed in paragraphs # 3 & 6 above.

As per independent claim 10, the claim adds "a first and a second arrays of processing elements". Applicant's "BACKGROUND OF THE INVENTION" discloses an equation which should be implemented by TWO arrays. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine Applicant's "BACKGROUND OF THE INVENTION" in Haque, thereby making the claimed invention, because the proposed device is an analog filter having TWO arrays as claimed.

As per dependent claim 11, the claim adds the "scaling factors ... correspond to the coefficients in a Fourier series approximation". The feature is old and well known in the art, e.g., see Applicant's "BACKGROUND OF THE INVENTION".

As per dependent claim 12, the claim feature is merely the label of two arrays.

As per dependent claim 13, the claim adds the "timing circuit comprises a plurality of delay elements". Haque teaches the equivalent function, see "switches 1i".

Due to the similarity of claims 14-17 to claims 10-13, they are rejected under a similar rationale.

8. Claims 2-3, 5, 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nelson.

Haque has been discussed in paragraph #4 above.

As per dependent claim 2, the claim adds the "scaling factors ... correspond to the coefficients in a Fourier series approximation". The feature is old and well known in the art, e.g., see (1) Wardle et al. (col. 21, lines 31-34), (2) Offord et al (col. 3, lines 63-67), Bowser et al. (col. 2, lines 32-40), (4) Felts, III et al (col. 2, lines 45-64), and Applicant's "BACKGROUND OF THE INVENTION". It would have been obvious to a person having ordinary skill in the art at the time the invention was made to design the claimed invention according to Nelson's teachings because the "coefficients in a Fourier series approximation" feature is merely design choice for desired application.

As per dependent claim 3, the claim adds the "timing circuit comprises a plurality of delay elements". Nelson teaches the equivalent function, see "switches 40-43".

As per dependent claim 5, due to the similarity of combined claims 3-4, it is rejected under a similar rationale.

Due to the similarity of claims 8-9 to claims 2-3, they are rejected under a similar rationale.

9. Claims 10-16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nelson in view of Applicant's "BACKGROUND OF THE INVENTION".

Nelson has been discussed in paragraphs # 4 & 8 above.

As per independent claim 10, the claim adds "a first and a second arrays of processing elements". Applicant's "BACKGROUND OF THE INVENTION" discloses an equation which should be implemented by TWO arrays. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine Applicant's "BACKGROUND OF THE INVENTION" in Nelson, thereby making

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the claimed invention, because the proposed device is an analog filter having TWO arrays as claimed.

As per dependent claim 11, the claim adds the "scaling factors ... correspond to the coefficients in a Fourier series approximation". The feature is old and well known in the art, e.g., see Applicant's "BACKGROUND OF THE INVENTION".

As per dependent claim 12, the claim feature is merely the label of two arrays.

As per dependent claim 13, the claim adds the "timing circuit comprises a plurality of delay elements". Nelson teaches the equivalent function, "switches 40-43".

Due to the similarity of claims 14-17 to claims 10-13, they are rejected under a similar rationale.

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Cited references are art of interest.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tan V. Mai whose telephone number is (571) 272-3726. The examiner can normally be reached on Mon-Wed and Fri. from 9:30am to 2:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kakali Chaki, can be reached on (571) 272-3719. The fax phone number for the organization where this application or proceeding is assigned is:

Official (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2100.



Tan V. Mai
Primary Examiner